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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/556,456

11/10/2005

Takahiro Kitahara

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EXAMINER

JACOBSON, MICHELE LYNN

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/556,456	<b>Applicant(s)</b> KITAHARA ET AL.	
	<b>Examiner</b> MICHELE JACOBSON	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is **non-final**.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 102 / 103***

2. Claims 1-3 and 7-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fukushi et al. (US 2003/0198770).

3. Fukushi et al. teach an article that may be used as a hose for conveying fuels (paragraph 0001). The article comprises a layer of a perhalogenated polymer (paragraph 0004). Additional layers comprising polymers, such as polyamides and polyolefins, may be used (paragraph 0037-0041). The perhalogenated polymer may comprise at least 95% of interpolymerized units, such as tetrafluoroethylene and chlorotrifluoroethylene, and further include other perfluorinated monomers (paragraph 0015). Additional perfluorinated monomers recited include hexafluoropropylene (HFP) (Para. 0023) and perfluoroalkyl vinyl ethers (PAVE) such as perfluoro(propyl vinyl ether) (PPVE) (Para. 0023). A polymer comprising at least 95% TFE and CTFE would be expected to have a fuel permeation coefficient that meets the limitations of claims 1-3 since such a polymer reads on the material described in the instant specification (see page 10, lines 5-13). Moreover, because the thickness of the perhalogenated layer (0.5

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mm in the Examples) is within the range cited in the instant specification (see page 23, lines 23-27), the resulting fuel hose would be expected to have a fuel permeation rate that meets the limitation of claims 1-3.

4. While Fukushi et al. do not illustrate a specific embodiment wherein a copolymer of CTFE, TFE, and a comonomer is used as the perhalogenated polymer, Fukushi et al. do teach that the perhalogenated polymer may comprise 95% of interpolymerized units such as TFE and CTFE in addition to other perfluorinated monomers (see paragraph 0015). One of ordinary skill in the art would have immediately envisaged that the additional perfluorinated monomers present in an amount of 5% or less could in separate embodiments comprise HFP and PAVE. The recitation of a laminate comprising such a polymer anticipates the limitations of claims 9-13.

5. In the event that one skilled in the art would not readily envisage a perhalogenated polymer comprising 95% of a combination of CTFE and TFE in addition to other perfluorinated monomers, it would have been obvious to one skilled in the art to use both CTFE and TFE in the perhalogenated polymer since it has been held that it is *prima facie* obvious to combine two compositions (e.g. monomers of CTFE and monomers of TFE) each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition (e.g. monomers of CTFE and TFE) to be used for the very same purpose. See MPEP 2144.06. The utilization of additional perfluorinated monomers such as HFP and PAVE as recited by Fukushi would have produced a laminate comprising the composition claimed in claims 9-12. Fukushi therefore either anticipates or obviates the limitations of claims 1-3 and 7-13.

***Response to Arguments***

6. Applicant's arguments filed 11/17/08 have been fully considered but they are not persuasive.

7. Applicant contends on page 5 of the remarks that because the specification recites that the monomer [A] affects the moldability, environmental stress cracking resistance and stress cracking resistance and because applicant asserts that monomer [A] does not improve the liquid chemical impermeability that the scope of claim 1 is commensurate with the unexpected results applicant has claimed to have obtained from synthesis examples 7 and 8. (it is noted that the examiner believes that applicant may have misnumbered the relevant examples in the previous communication and intended examples 7 and 8, which have the lowest fuel permeation coefficient values to be indicative of the claimed unexpected results) However, as stated in MPEP 716.02 (d) "Whether the unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, the "objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support." In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range. *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980)". In the instant case, applicant is claiming all monomers, whereas the *evidence* offered to support this claim only applies to polymers comprising PPVE. As such, applicant's arguments asserting unexpected results are not found persuasive.

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8. Additionally, as previously noted, evidence of unexpected results may not be used to overcome a rejection based on anticipation. In the instant case, Fukushi recites polymers comprising 95% CTFE and TFE and PPVE in amounts of less than 5% which anticipates the claimed invention.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHELE JACOBSON whose telephone number is (571)272-8905. The examiner can normally be reached on Monday-Thursday 8:30 AM-7 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michele L. Jacobson  
Examiner /M. J./  
Art Unit 1794

/Carol Chaney/  
Supervisory Patent Examiner, Art Unit 1794